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1

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4191-041	CONTROL BOX ASSEMBLY
2	1	D4191-1	HOUSING
3	1	D4191-3	HOUSING COVER
4	1	D4191-5	ACCESS COVER
5	1	D4191-7	PINION
6	1	D4191-9	RACK
7	1	D4191-11	BUSHING
8	1	D4191-13	CABLE ADAPTER
9	1	D4191-15	RACK COVER
10	1	D4191-17	SHIM BLOCK
11	1	NAS509-7	NUT
12	4	MS20470AD_Rivet	
13	3	MS27039_Screw	SCREW

**D4191-041 CONTROL BOX ASSEMBLY**

NOTES:

1) MATERIAL: N/A

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1

7) WEIGHT: 1.24 lbs

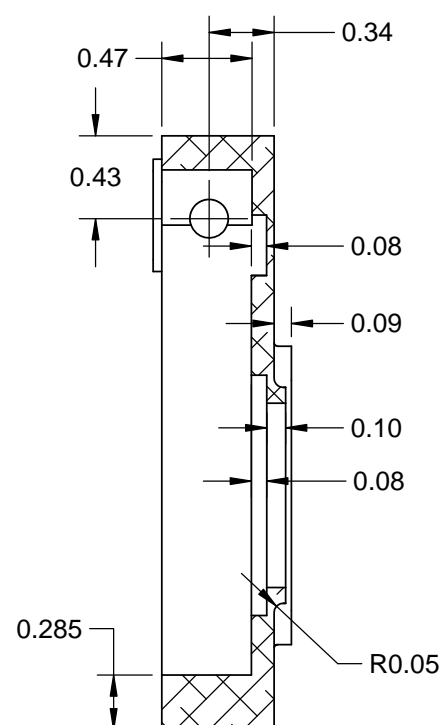
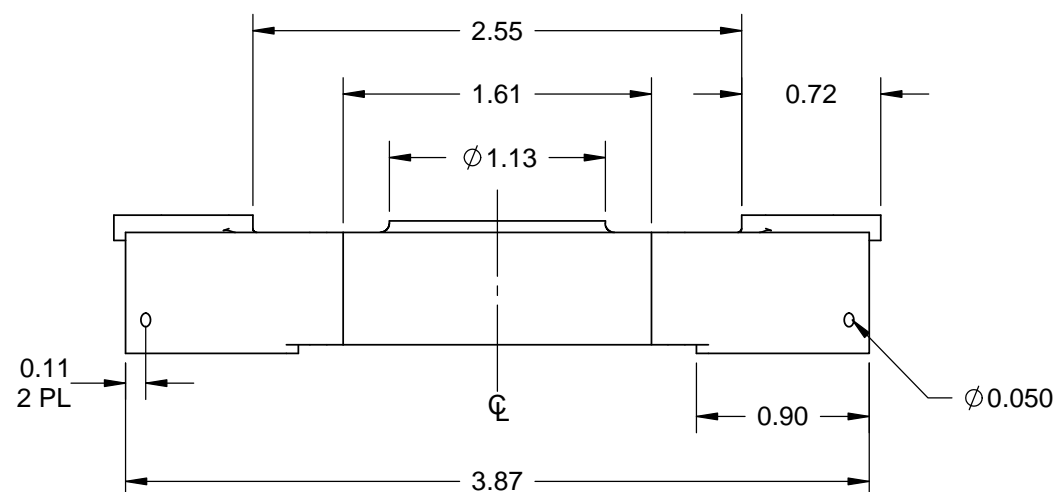
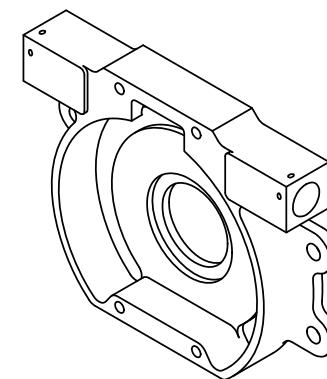
8) GENEROUSLY LUBRICATE MATING SURFACES AS INDICATED WITH PLASTILUBE MOLY 3 ON ASSEMBLY

9) ALIGN INDEX MARKS ON RACK AND PINION DURING ASSEMBLY

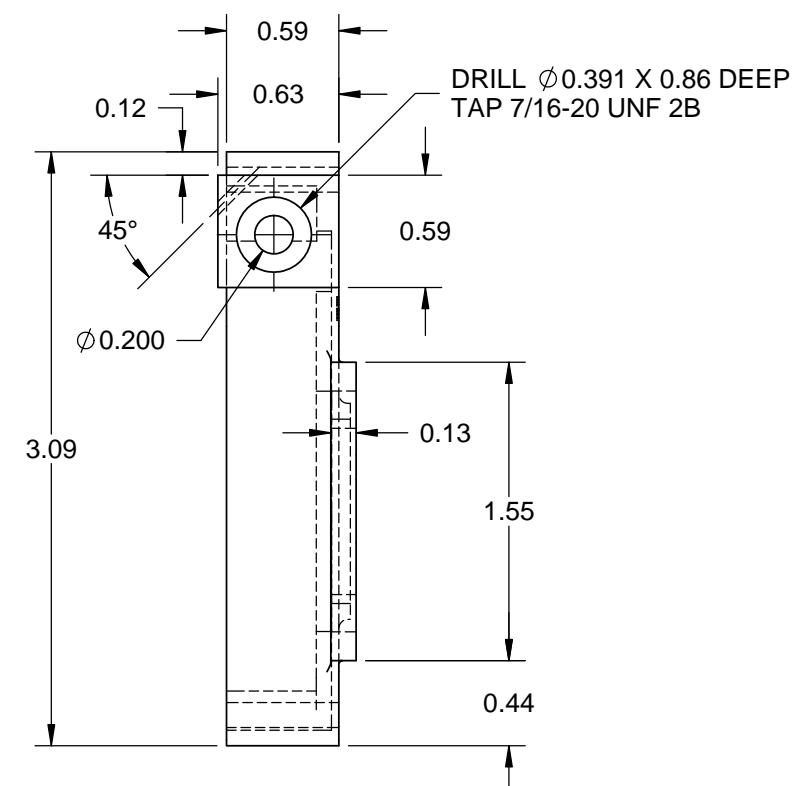
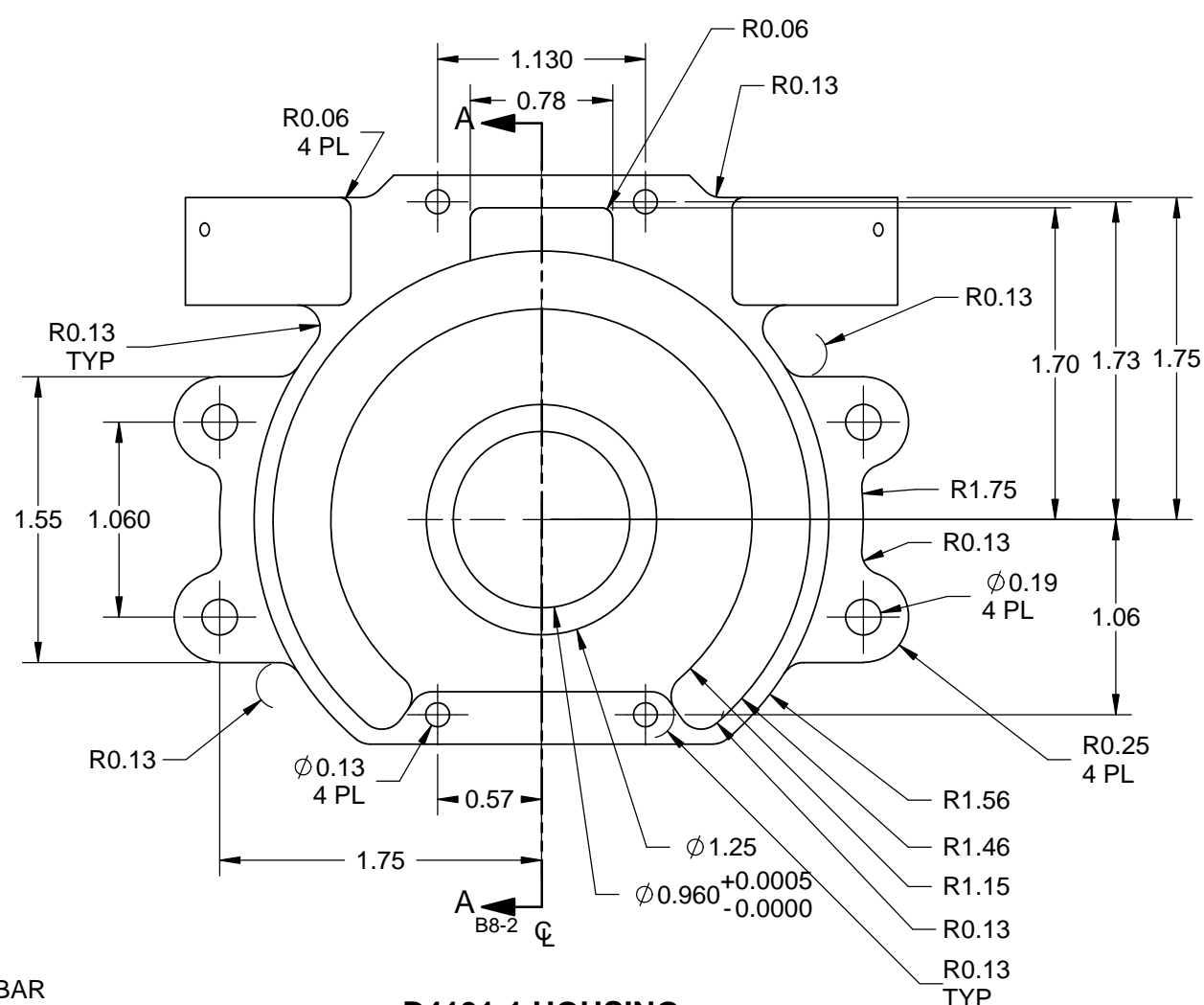
PRELIMINARY ISSUE

10.11.17

PA5	NEW ISSUE		10.11.17
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.11.17		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. PA5 SHEET 1 OF 12	
CONTROL BOX		SCALE NTS	
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**SECTION A-A** A5-2







NOTES:

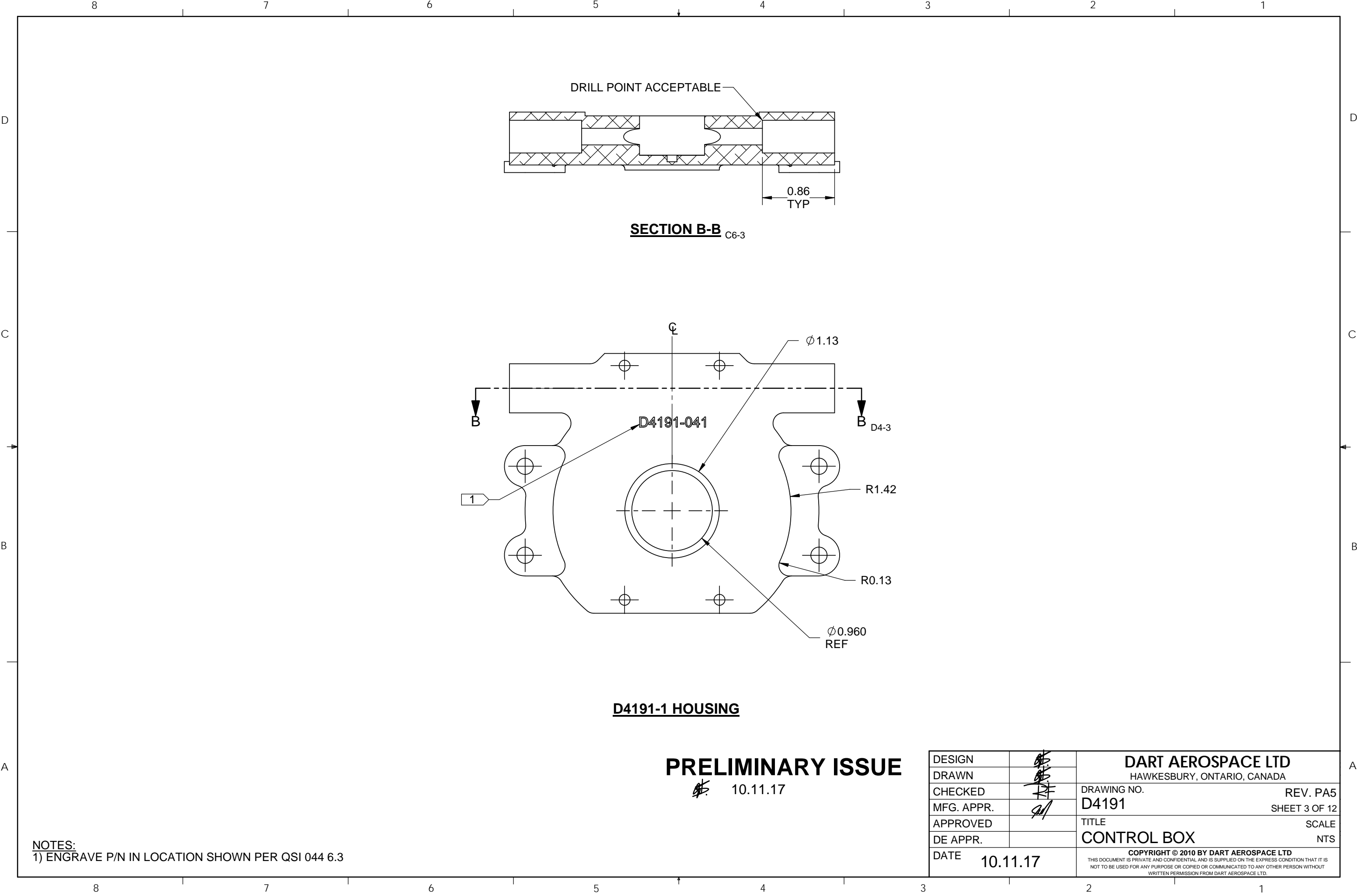
- NOTES:**
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8  
OR AMS 4117/4128/4115/4116  
OR QQ-A-200/8 OR AMS-QQ-A-200/8  
OR AMS 4160  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6B
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.31 lbs

**D4191-1 HOUSING**

# PRELIMINARY ISSUE

~~10.11.17~~ 10.11.17

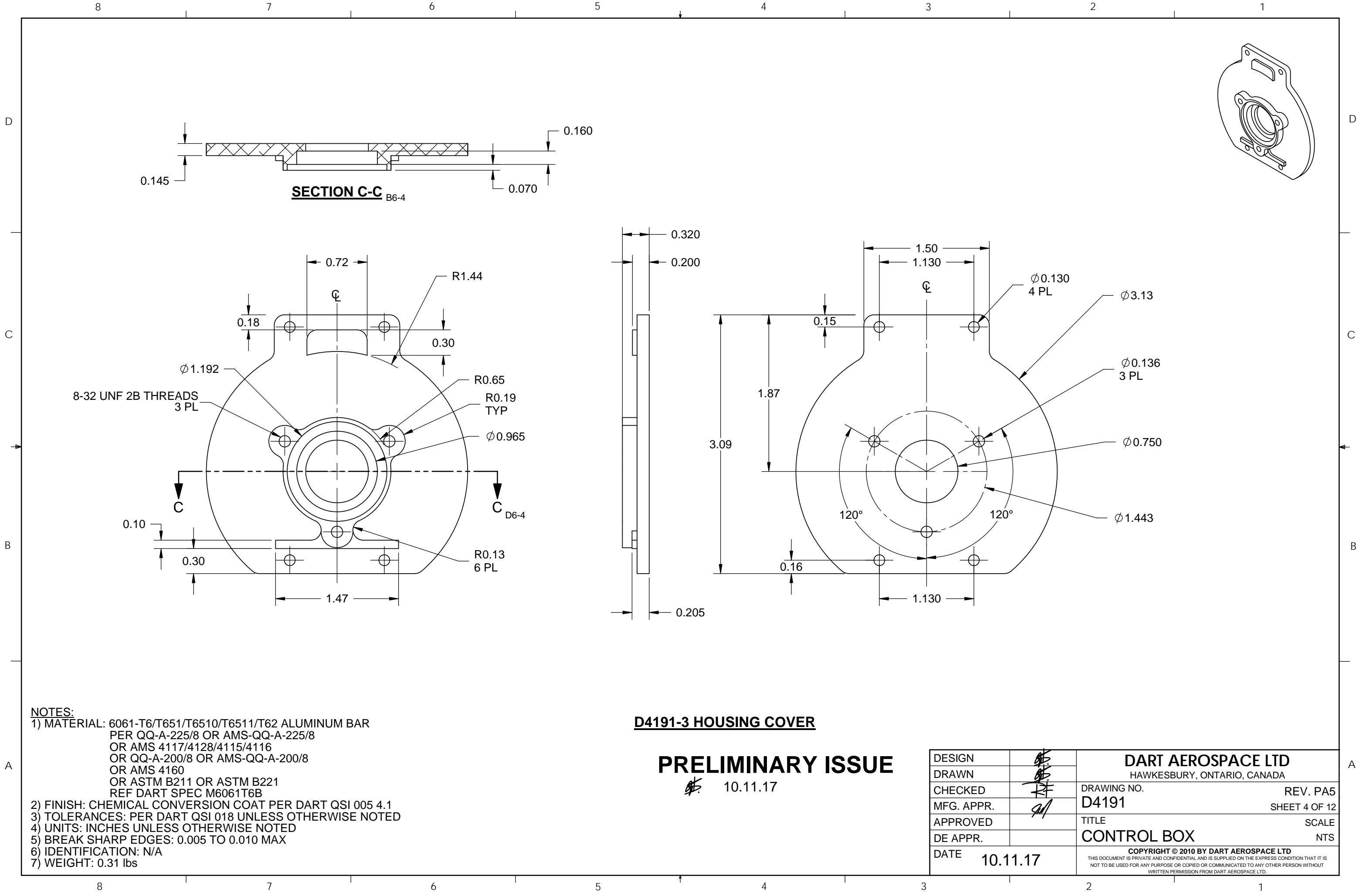
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. REV. PA5
MFG. APPR.		D4191 SHEET 2 OF 12
APPROVED		TITLE SCALE
DE APPR.		CONTROL BOX NTS
DATE	10.11.17	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD

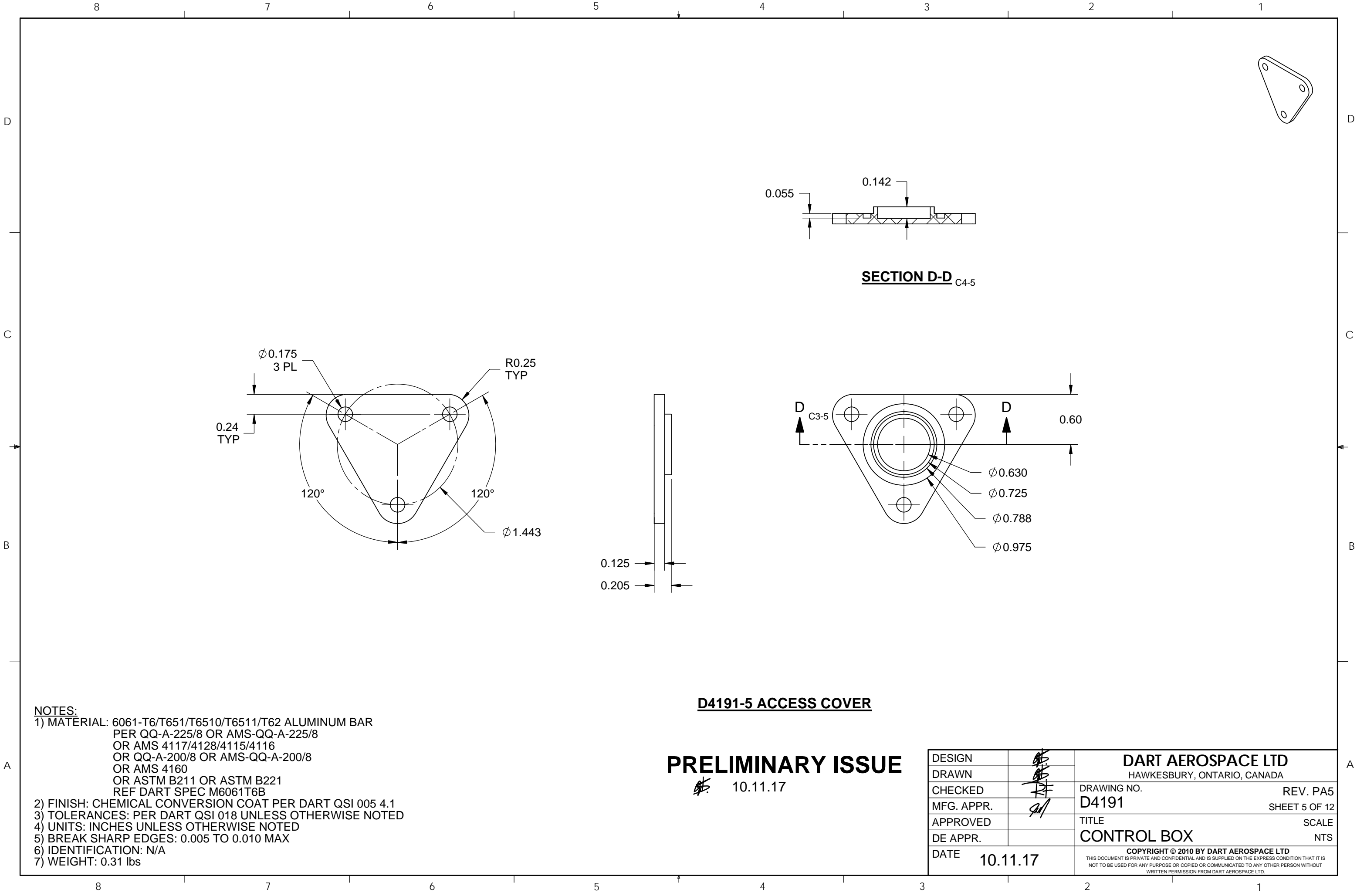


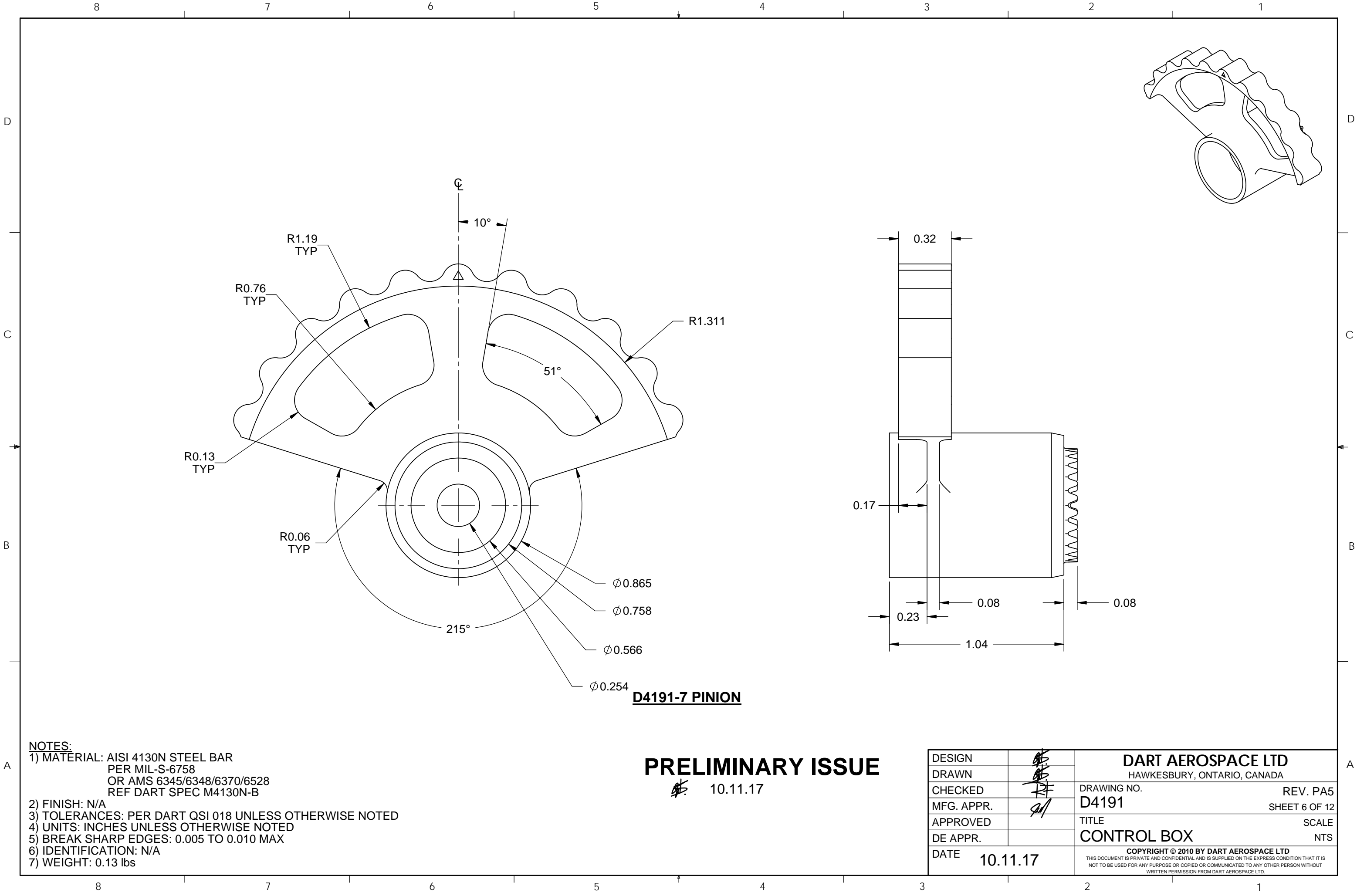
NOTES:  
1) ENGRAVE P/N IN LOCATION SHOWN PER QSI 044 6.3

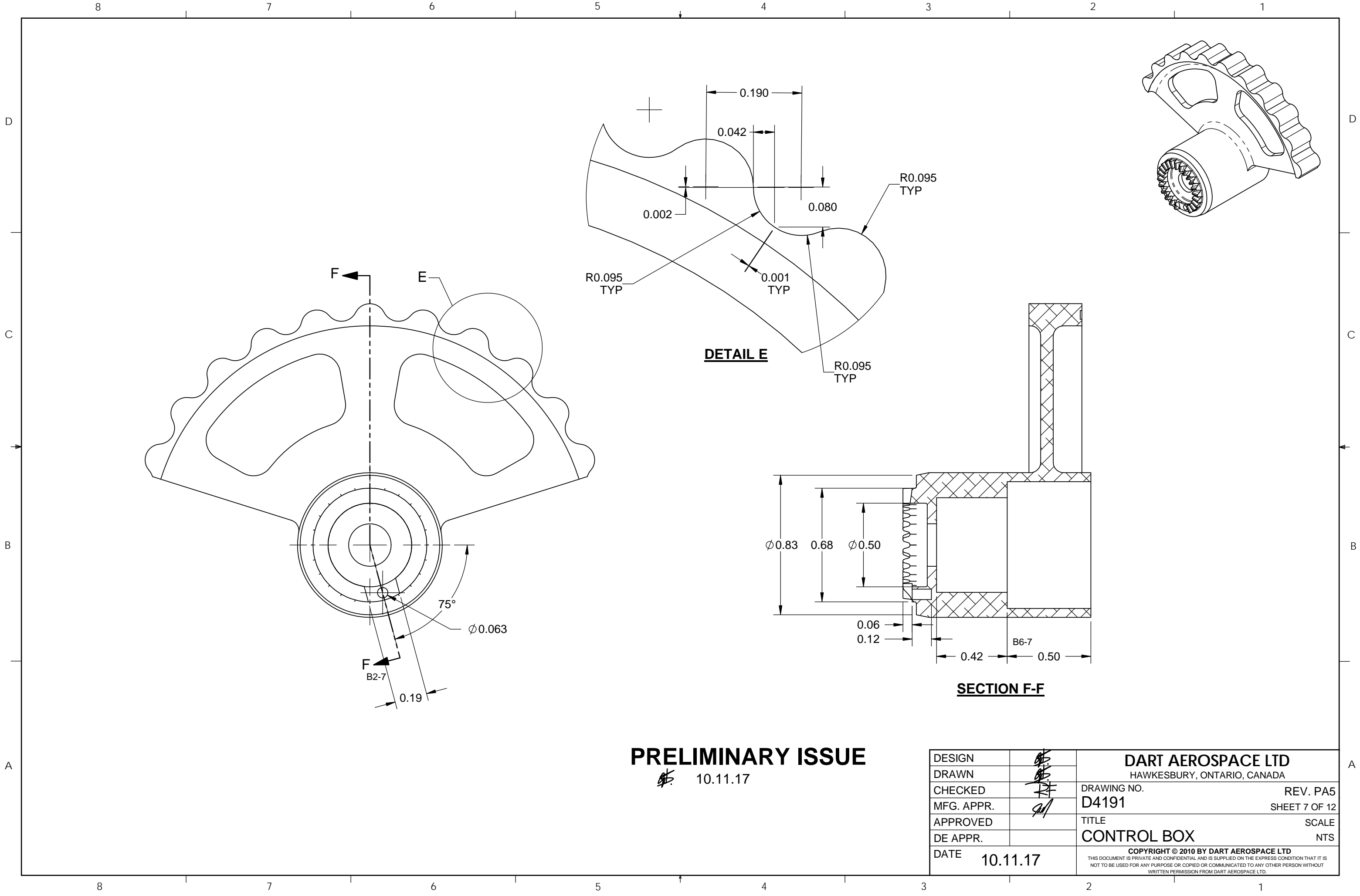
**PRELIMINARY ISSUE**  
10.11.17

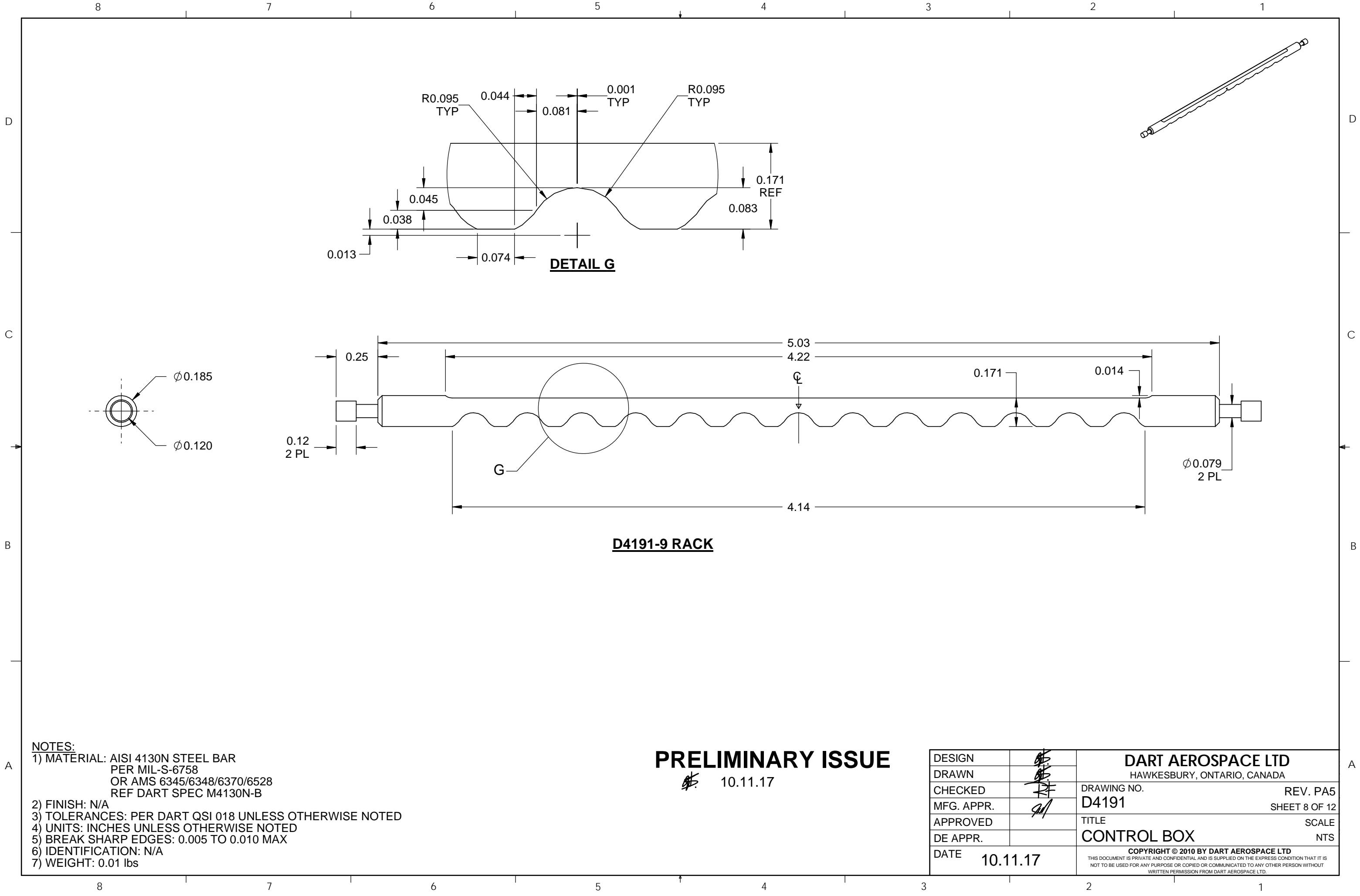
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. PA5
MFG. APPR.		D4191	SHEET 3 OF 12
APPROVED		TITLE	SCALE
DE APPR.		CONTROL BOX	NTS
DATE	10.11.17	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



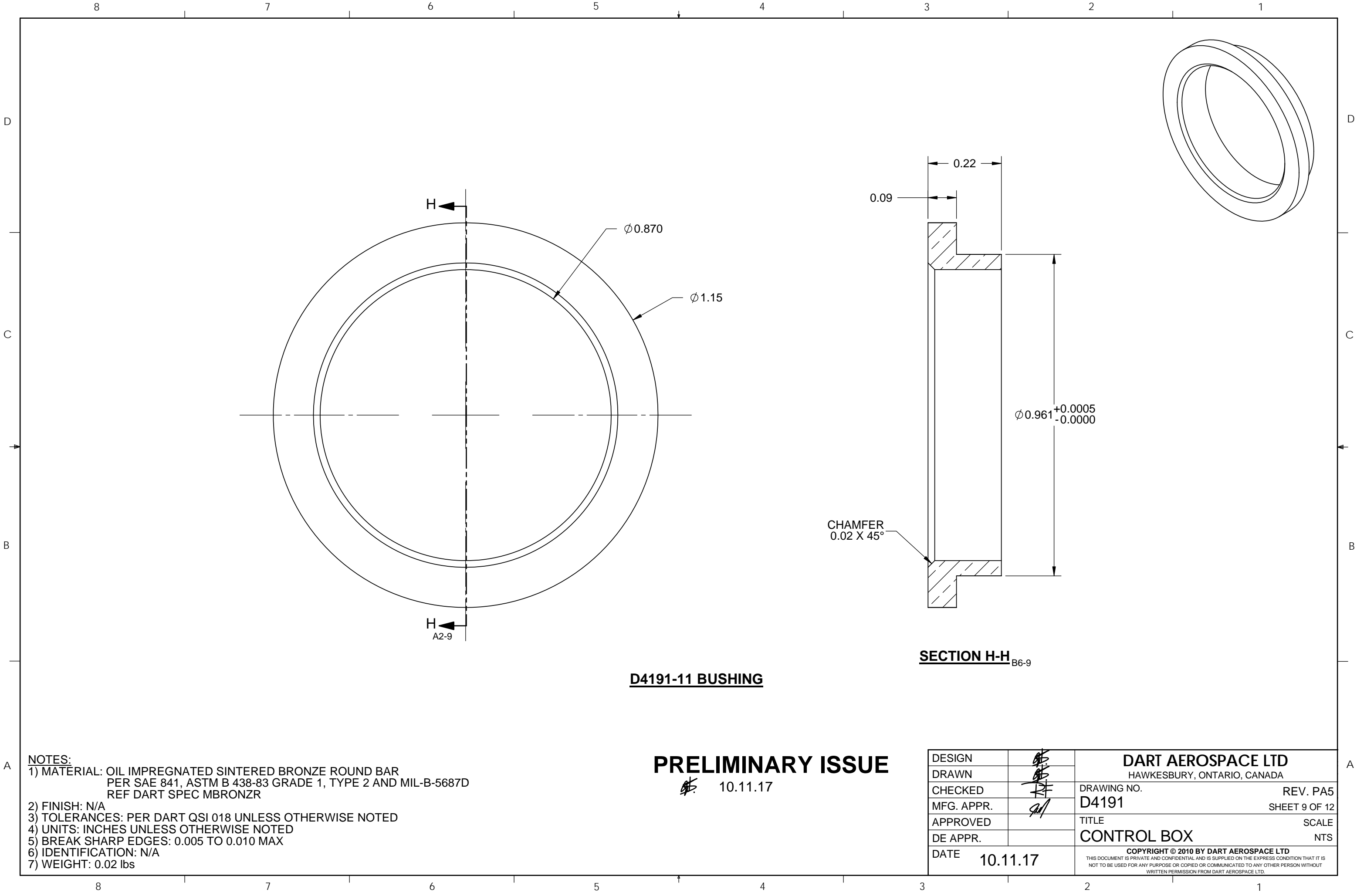












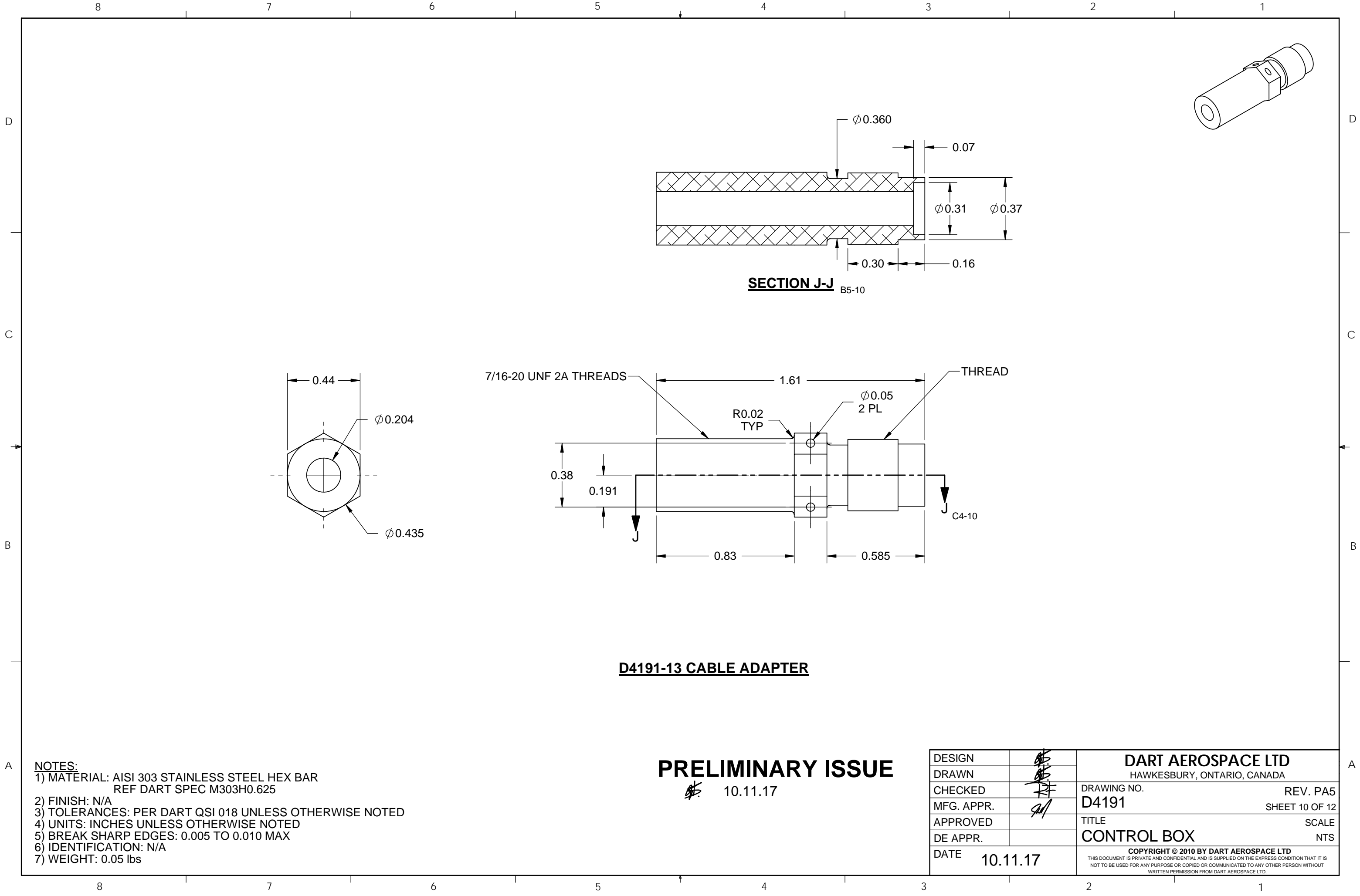
NOTES:  
1) MATERIAL: OIL IMPREGNATED SINTERED BRONZE ROUND BAR  
PER SAE 841, ASTM B 438-83 GRADE 1, TYPE 2 AND MIL-B-5687D  
REF DART SPEC MBRONZR  
2) FINISH: N/A  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
6) IDENTIFICATION: N/A  
7) WEIGHT: 0.02 lbs

**D4191-11 BUSHING**

**PRELIMINARY ISSUE**  
10.11.17

**SECTION H-H** B6-9

DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO. <b>D4191</b>	REV. PA5 SHEET 9 OF 12
MFG. APPR.		TITLE <b>CONTROL BOX</b>	SCALE NTS
APPROVED		<b>COPYRIGHT © 2010 BY DART AEROSPACE LTD</b> <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	
DE APPR.			
DATE	10.11.17		

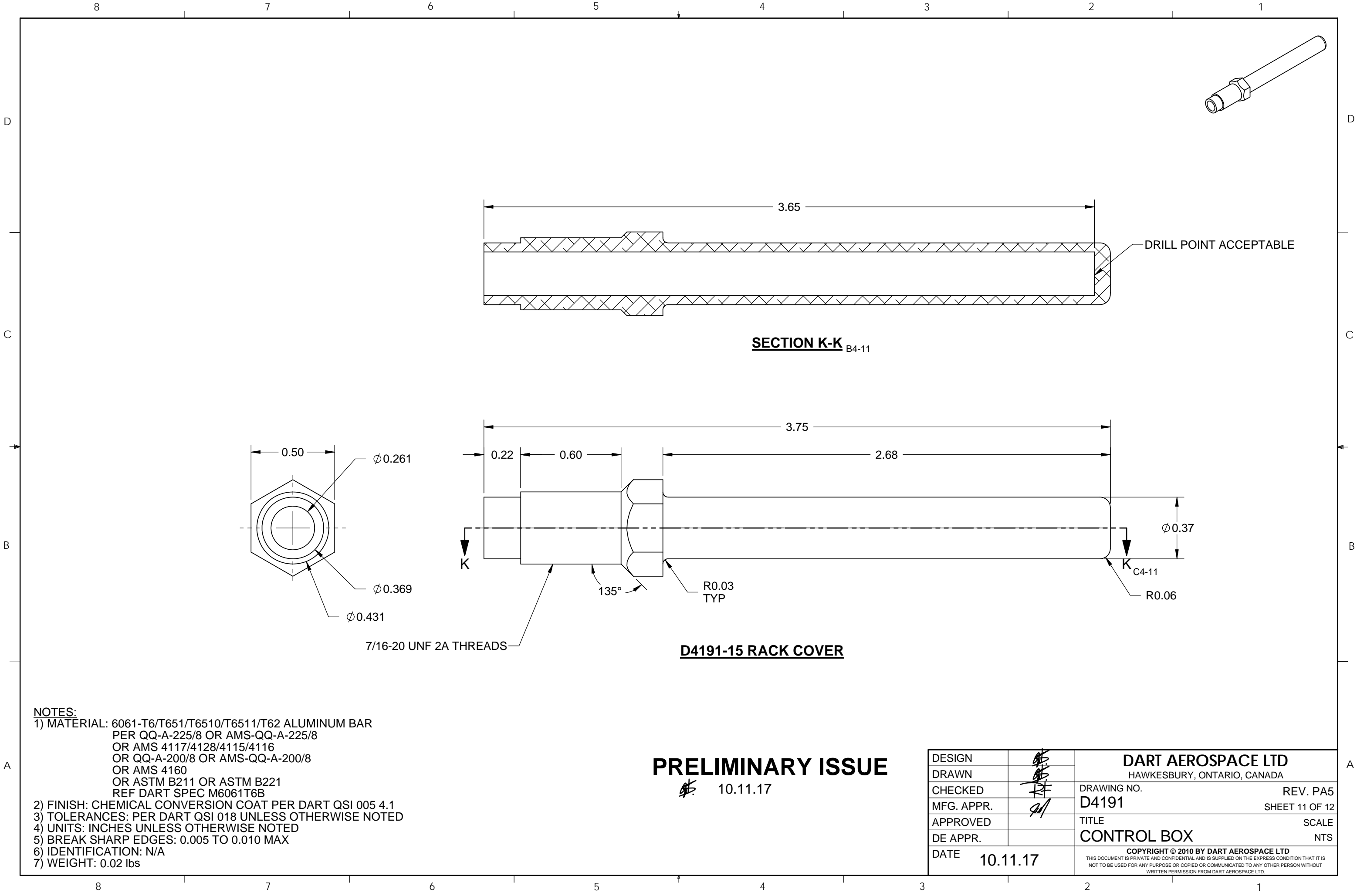


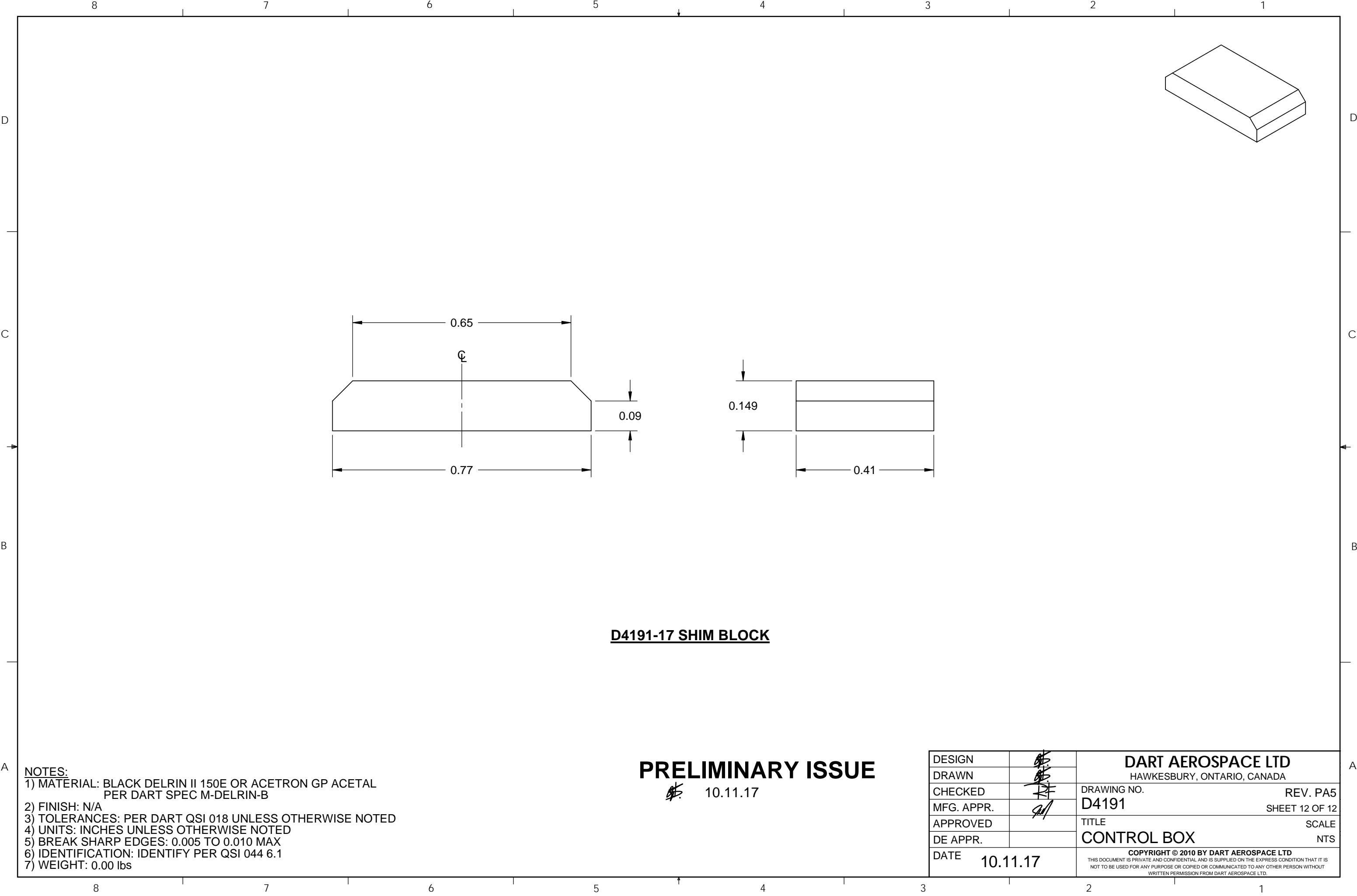
NOTES:  
1) MATERIAL: AISI 303 STAINLESS STEEL HEX BAR  
REF DART SPEC M303H0.625  
2) FINISH: N/A  
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) UNITS: INCHES UNLESS OTHERWISE NOTED  
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
6) IDENTIFICATION: N/A  
7) WEIGHT: 0.05 lbs

D4191-13 CABLE ADAPTER

PRELIMINARY ISSUE  
10.11.17

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO. D4191	REV. PA5
MFG. APPR.		SHEET 10 OF 12	
APPROVED		TITLE	SCALE
DE APPR.		CONTROL BOX	NTS
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**D4191-17 SHIM BLOCK**

**PRELIMINARY ISSUE**

**10.11.17**

- NOTES:**
- 1) MATERIAL: BLACK DELRIN II 150E OR ACETRON GP ACETAL  
PER DART SPEC M-DELRIN-B
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
  - 7) WEIGHT: 0.00 lbs

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. REV. PA5
MFG. APPR.		D4191 SHEET 12 OF 12
APPROVED		TITLE SCALE
DE APPR.		CONTROL BOX NTS
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